A Simulating Analogue Circuit for Combined Control System of Two Magnitudes

have at least one and the same multiplier). There are 2 diagrams, 1 table and 3 Soviet references.

ASSOCIATION: Bryanskiy institut transportnogo mashinostroyeniya (Bryansk Institute of Transportation Machine Building) Kafedra energetiki (Chair of Power Engineering)

SUBMITTED: July 23, 1958

RAYKHEL', Z.Sh.; LEVTOV, M.R.; MAGIDIN, L.Z.; YEL'KIN, M.A.

SL-9 and SL-8 sealed bottom discharge devices for petroleum tank cars. Transp. i khran. nefti i nefteprod. no.7:21-24 '65. (MIRA 18:9)

RAYKHER, S.A.; POLUEKTOV, Ye.V., redaktor; POPOLOV, Ya.N., redaktor izdatel'stva; UVAROVA, A.F., tekhnicheskiy redaktor

[Safety measures in heat treatment shops] Tekhnika bezopasnosti v termicheskikh tsekhakh. Izd. 2-oe, perer. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 143 p. (MLRA 10:1)
(Machine-shop practice--Safety measures)

RAYKHER, S.A.; RAYLO, P.I.

"Principles of safety techniques" B.M. Zlobinskii. Reviewed by S.A. Raikher, P.I. Railo. Stal' 16 no.7:668-669 Jl '56. (MLRA 9:9)

1. Ministerstvo chernoy metallurgii SSSR.
(Metallurgical plants--Safety measures)
(Zlobinskii, B.M.)

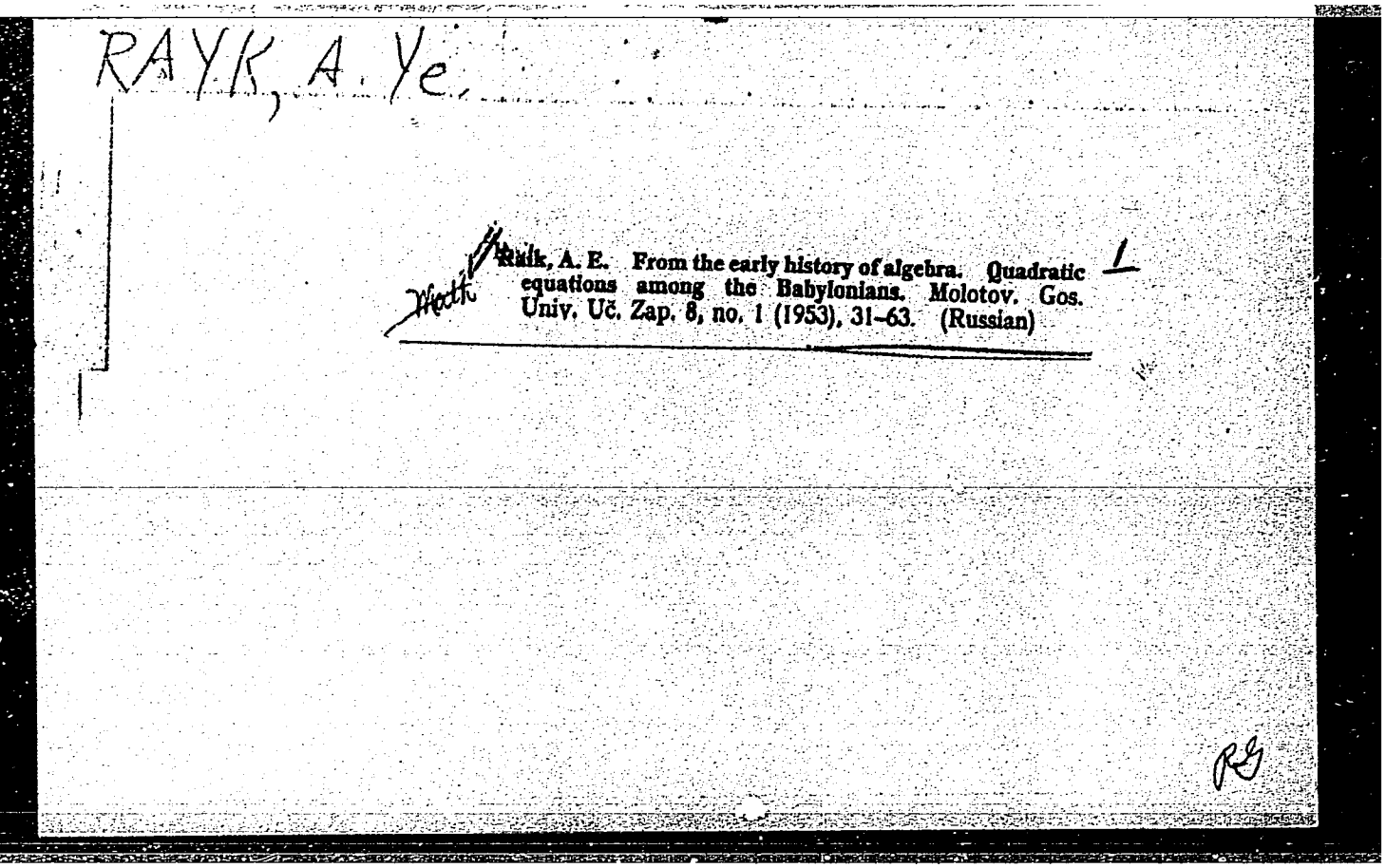
1. MAN'KOVS'KYI, Docent M. B.; MINTS, Docent Ya. I.; RAYHCRODS'KA, L. Ya.

2. USSR (600)

4. Nervous System

7. Pathological changes in the nervous system in grippe. Medych. zhur. 22, No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.



RAYK, A. Ye.

Math

Raik, A. E. From the early history of algebra. Quadratic equations among the Babylonians. Molotov. Gos. Univ. Uč. Zap. 8, no. 1 (1953), 31–63. (Russian)

1

RS

KAYK, N-Ye.

2

U S S R

Raĭk, A. E. The Ural mathematician, Ivan Miheevič Pervušin. Istor.-Mat. Issled. 6, 535–572 (1953). (Russian)

T-1/VI

BALANDIN, A.A.; RAYK, S.Ye.

Effect of skeleton nickel on hydrocarbons under conditions of a lasting contact. Zhur. prikl. khim. 30 no.11:1711-1715 N '57. (MIRA 11:2)

1. Kafedra organicheskogo kataliza Moskovskogo gosudarstvennogo universiteta.

(Catalysts, Nickel) (Hydrocarbons)

RAYK, S. Ye.

3

USSR

The preparation of ethyl 1,1-cyclobutanedicarboxylate. S. E. Raik and B. A. Kazanskii. *Vestnik Moskov. Univ.* 8, No. 8, *Ser. Fiz.-Mat. i Estestven. Nauk* No. 2, 125–8(1953). During the condensation of $CHNa(CO_2Et)_2$ (I) with $Br(CH_2)_3Cl$ a reversible side reaction between I and $Cl(CH_2)_3CNa(CO_2Et)_2$ (II) is known to take place. II was prevented from sepg. out and the yield of di-Et 1,1-cyclobutanedicarboxylate was increased to 60% (from 35 to 40%, cf. *C.A.* 37, 4705⁸) by employing a mixt. of C_6H_6 and EtOH as solvent. I is only slightly sol. in cold C_6H_6 but its soly. increases with higher temp., and particularly in the presence of $CH_2(CO_2Et)_2$, thus controlling the rate of reaction.

Cf. Sidgwick and Brewer, *C.A.* 20, 740. PrOH and iso-PrOH were unsuccessful in replacing EtOH. G. A.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.

Card 79/80

RAYKHL', M.A., inzh.; VETRENKO, A.A., inzh.

Spray gun invented by innovator P.V. Chistiakov. Biul.tekh.inform. 5 no.1:30 Ja '59. (MIRA 12:4)
(Spray painting--Equipment and supplies)

RAYKERUS, A.A.

22926 K voprosy o chilennykh metodakh integrirovaniya differentsial'nykh uravneniy s chastnymi proizvodnymi. Uchen. Zapiski karelo-fin. Gos. Un-ta, T.II, Vyp. 4, 1947 (Izd: 1949) C. 17-52 Bibliogr: 8 Nazv.

SO: LETOPIS' NO. 31, 1949

L 19358-66 EWT(d)/T/EWP(1) IJP(c)

ACCESSION NR: AR5008662 S/0044/65/000/001/B068/B068

10
B

SOURCE: Ref. zh. Matematika, Abs. 1B314

AUTHOR: Raykerus, A. A. (Deceased)

10, 44, 55

TITLE: An application of the method of successive approximations to the solution of a full singular integral equation of the first kind

CITED SOURCE: Uch. zap. Petrozavodskogo un-ta, v. 11, no. 5, 1963 (1964), 3-6

TOPIC TAGS: integral equation, approximation method

TRANSLATION: It is proposed to solve by the method of successive approximations the singular integral equation

$$K\varphi = \frac{1}{\pi i}\int_L \frac{\varphi(t)\,dt}{t-t_0} + \frac{1}{\pi i}\int_L k(t_0, t)\,\varphi(t)\,dt = f(t_0),$$

where L is the totality of separately lying smooth open arcs $L_k = \bigcup a_k b_k$. The method of successive approximations is given:

$$\varphi_n = K^0(f - k\varphi_{n-1}) = \varphi_0 - K^0 k\varphi_0 + (K^0 k)^2\varphi_0 + \ldots + (-1)^n (K^0 k)^n \varphi_0,$$
$$n = 1, 2, \ldots,$$

Card 1/2

L 19358-66

ACCESSION NR: AR5008662

where $\phi_0 = K^* f$ is the solution of the characteristic equation $\frac{1}{\pi i}\int_L \frac{\varphi(t)\,dt}{t-t_0} = f(t_0)$, and k is the Fredholm operator: $k\varphi = \frac{1}{\pi i}\int_L k(t_0, t)\varphi(t)\,dt$. The conditions are indicated under which ϕ_n converges to an exact solution of the initial equation. V. V. Ivanov

SUB CODE: MA ENCL: 00

Card 2/2 BG

RAYKERUS, A.A.

22927 O chislennom reshenii uravneniy volny. (metodsetok). Uchen. Zapiski karelo-fin. Gos. Un-ta, T.II, Vyp. 4, 1947 (Izd: 1949), C. 58-68.

SO: LETOPIS' NO. 31, 1949

RAYKERUS, A.A.

Approximate calculation of singular integrals with Cauchy kernels. Uch. zap. Kar. ped. inst. 14:3-7 '63. (MIRA 17:3)

"On Error Evaluation in the Numerical Solution of Equations of the Hyperbolic Types" Uch. Zap. Karelo-Finsk. Un-ta, Vol 3, No 4, 1954, 3-15

The author evaluates the error in the solution by the network method of the equation $u_{tt} = a^2 u_{xx} + bu_x + cu + f(x,t)$. He takes into account only the errors arising as a result of the substitution of the corresponding difference ratios for the differential ratios occuring in the givenequations as well as in the initial conditions, (RZhMat, No 11, 1955)

RAYKH, A.

RT-1004 (Calculation of the lateral-dynamic stability of aircraft) Raschet Bokovoi dinamicheskoi ustoichivosti samoleta.
TRUDY TSENTRAL'NOGO AERO-GIDRODINAMICHESKOGO INSTITUTA, (453): 1939.

RATKH, AL.L.

Raschet bokovoi dinamicheskoi ustoichivosti samoleta. Moskva, 1939. tables, diagrs. (TSAGI. Trudy, no.453)

Includes bibliography.

Title tr.: Calculation of the lateral-dynamic stability of aircraft.

NCF

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

RAYKH, A. L.

Teoriia i metodika eksperimental'nogo opredeleniia vrashchatel'nykh proizvodnykh. Moskva, 1939. 34 p., diagrs. (TSAGI. Trudy, no. 419)

Title tr.: Theory and methods of experimental determination of the rotational derivatives.

QA911.M65 no. 419

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

RAKH, I. A.

"The History of Moscow Hospitals During the Pre-Revolutionary Period." Cand Med Sci, Second Moscow State Medical Inst imeni I. V. Stalin, Moscow, 1955. (KL, No 15, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

SEREBRYAKOV, V.M., inzhener; FAYNGERSH, Ya.D., inzhener; RAYKH, I.Ya., inzhener

Use of glass tubing in electric installation work. Sbor. mat. o nov. tekh. v stroi. 17 no.7:22-26 '55. (MLRA 8:9)
(Electric conduits)

RAYKH, I. Ya.

AID P - 1911

Subject : USSR/Engineering

Card 1/1 Pub. 29 - 16/25

Authors : Raykh, I. Ya., Eng. and Fayngersh, Ya. D., Eng.

Title : Mounting of a vertical dry cable

Periodical : Energetik, no.2, 26-29, F 1955

Abstract : The author describes the mounting of a 10 kv cable at the Moscow State University (MGU). The high-voltage substations at the MGU are located on levels 30 to 100 m apart. Three drawings and 6 photographs.

Institution: As mentioned above

Submitted : No date

RAYKH, I.Ya., inzhener; FAYNGERSH, Ya.D., inzhener.

Industrial methods of handling and installing steel pipes used in electric wiring. Strel. prom. 33 no.10:17-20 O '55. (MLRA 9:1)
(Electric conduits)

RAYKH, I.Ya., inzhener; FAYNGERSH, Ya.D., inzhener.

Device for use with loaders in installing outdoor lighting systems. (MLRA 8:4)
Mekh.stroi. 12 no.2:31-32 F '55.
(Street lighting) (Fork lift trucks)

BELOV, Georgiy Vasil'yevich; RAYKH, I.Ya., inzh., red.; LEVCHIK, L.P., red.; LEBEDEVA, L.V., tekhn. red.

[Installation of 500 kv. air switch]Montazh vozdushnogo vykliuchatelia napriazheniem 500 kv. Moskva, Orgenergostroi, 1962. 51 p. (MIRA 15:12)

(Electric cutouts) (Electric lines--Overhead)

RAYKH, I.Ya., inzhener; FAYNGERSH, Ya.D., inzhener.

Terminals and contacts for wire and cable current-carrying cores. Mekh.stroi.11 no.9:30-32 S '54. (MLRA 7:9)
(Electric cables)

RAYKH, I.Ya., inzhener; FAYNGERSH, Ya.D., inzhener.

Method of laying and installing a vertical dried cable. Energetik 3 no.2:26-29 F '55. (MLRA 8:1)
(Electric cables)

ARIYA, S. M., MOROZOVA, M. P., MARKEVICH, G. S., AND RAYKHARDT, A.A.

Investigating the System Platinum-Oxygen. I
Sb. Statey Po Obsch. Khimii. M. -L., Izd-vo AN SSSR. Vol 1, 1953, pp 76-82

Investigated the reaction of platinum black with oxygen in the temperature interval 430-600° and 8.5-310 atm pressure of oxygen. One product was found to have the composition $PtO_{1.20}$ which was capable of being still further oxidized when treated with aqua regia. X-ray diffraction patterns indicate that a new crystal phase is formed. (RZhKhim, no 21, 1954)

SO: Sum. No. 639, 2 Sep 55

RAYKHBAUM, Ya.D.

Kinetics of vapor formation of substances in electric arcs. Izv. AN SSSR. Ser. fiz. 19 no.1:70-72 Ja-F '55. (MLRA 8:9)
(Spectrumanalysis) (Spectrometer)

USSR/Minerals - Spectral analysis

Card 1/1 Pub. 43 - 75/97

Authors : Raykhbaum, Ya. D., and Kostyukova, E. S.

Title : Spectral analysis during the control of concentration processes of ores of non-ferrous metals

Periodical : Izv. AN SSSR. Ser. fiz. 18/2, page 289, Mar-Apr 1954

Abstract : Experimental data are presented regarding the conduct of a spectral analysis during the control of ore concentration processes. Analysis in this case requires complete evaporation of the sample from the cavity of the carbon electrode which results in certain errors. Errors connected with the nonuniformity in the distribution of the metal in the concentration products are of great importance and limit the application of the total evaporation method at small concentrations. Higher concentrations reduce the errors to a permissible limit.

Institution : .....

Submitted : .....

S/051/61/010/004/004/007
E032/E314

AUTHORS: Raykhbaum, Ya.D. abd Malykh, V.D.

TITLE: On the Possible Cause of the "Carrier" Effect in Spectral Analysis

PERIODICAL: Optika i spektroskopiya, 1961, Vol. 10, No. 4, pp. 524 - 527

TEXT: It is well known that the addition of small amounts of certain compounds ("carriers") to the sample to be analysed leads to an increase in the intensity of the lines belonging to the elements under analysis. The present authors have carried out an experimental investigation of this effect. The compounds which are usually employed as the "carriers" were placed in the channel in the electrodes of a DC arc. The electrodes were made of spectroscopically pure carbon and the channel in them was 3 mm in diameter, 3.5 mm long and the wall thickness was 0.5 - 1 mm. The experiments were carried out with arc currents of 5 - 15 A and the lower electrode served as the anode. The materials on which the effect of the "carrier" was investigated were deposited on the surface of

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On the Possible Cause ....

probes which were made of nichrome wire, 0.2 mm in diameter and 80 - 100 mm long. These probes were fixed on the axis of a synchronous motor (SD-60), supplied from the (ZG-12) generator. The probes were so arranged that they moved in a horizontal plane and intersected the arc at the mid-point of the discharge gap. The linear velocity of the probes in the discharge gap could be varied between 30 and 120 cm/sec. The evaporation of the elements deposited on the probes and the entry of the vapour into the discharge were thus pulsed and occurred while the probes were within the discharge gap. The lines of the elements were recorded with the aid of the (KS-55) glass spectrograph, incorporating a two-channel photo-electric attachment. Changes in the intensities of the lines and the probe current were measured at the same time. On removal of the probe from the discharge gap, i.e. termination of evaporation, the intensity of the lines was found to decrease exponentially. It was therefore possible to determine the average time of existence of the atoms in the excitation zone ( ). Table 1 gives the measured values

Card 2/7

On the Possible Cause ....

of τ for lithium and thallium in the presence of the "carriers" (~ 10 A DC arc). Table 2 shows the dependence of the "carrier" effect on the ionisation potential of the various elements (15 A DC arc). It is concluded from these results that the effect of the "carrier" is associated with an increase in τ but that this increase in τ is due not only to thermal but also to electrical parameters in the discharge column. Probe measurements of the radial field distribution were also carried out. The field distribution was obtained with double rotating probes, consisting of two insulated nichrome wires, 0.2 mm in diameter, and located at a distance of 1.5 mm from each other. The two wires intersected at the arc at the mid-point of the discharge gap and moved across it in the horizontal direction with a velocity of 80 cm/sec. The current between the two probes was measured with an oscilloscope. These measurements showed that the introduction of "carriers" leads to a considerable reduction in the field gradient in the radial direction. The reason for this is the formation of negative ions. Table 3 shows the change in τ when various chemical compounds are

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E032/E314

On the Possible Cause ....

introduced into the arc (10 A DC arc).
There are 4 figures, 3 tables and 8 references: 4 Soviet
and 4 non-Soviet.

SUBMITTED: May 26, 1960

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S/051/61/010/004/004/007
E032/E314

On the Possible Cause ....

Table 1:

Element	Wave-length, Å	$\tau \cdot 10^3$, sec			
		Without "carrier"	Metallic Silver	Silver Chloride	Gallium Oxide
Lithium	4602.86	1.0	1.1	2.4	1.95
Thallium	5350.46	1.9	2.1	4.6	3.8

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E032/E314

On the Possible Cause ....

Table 2:

Element	Ionisation Potential, eV	Wavelength, Å	Excitation Energy, eV	$\tau \cdot 10^3$, sec: Without "carrier"	$\tau \cdot 10^3$, sec: Gallium Oxide	Relative Change in τ
Lithium	5.39	4602.86	4.54	1.4	2.6	1.86
Thallium	6.11	5350.46	3.28	3.0	5.2	1.73
Zinc	9.39	4810.53	6.66	2.7	4.3	1.59
Mercury	10.43	4358.35	7.73	6.0	5.3	0.88

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On the Possible Cause ....

Table 3:

Element	Wavelength, Å	$\tau \cdot 10^3$, sec								
		Without additive	Li_2CO_3	LiF	LiCl	LiI	Na_2CO_3	NaF	NaCl	NaBr
Lithium	4602.86	1	-	-	-	-	2.3	3.5	2.3	3.0
Thallium	5350.46	1.95	3.7	6.0	4.2	2.7	3.7	6.7	3.7	4.5
Mercury	4358.35	3.8	2.7	2.9	2.7	-	2.6	2.8	2.9	2.5

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S/032/61/027/003/011/025
B101/B203

AUTHORS: Raykhbaum, Ya. D. and Kostyukova, Ye. S.

TITLE: Increase in sensitiveness in the spectroscopic determination of rare elements in solutions

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 3, 1961, 306-309

TEXT: In controlling the production of rare metals from mineral raw material it was found that the sensitiveness of determination depended on the kind of introduction of the solution into the spark gap. When the solution was sprayed on by means of a rotating graphite disk (diameter 32 mm, thickness 5 mm), ИГ-3 (IG-3) generator (C = 0.05 microfarais, L = 0.01 microcherry, spark gap 3 mm), an increase in the intensity of hydrogen lines 6,563 A and 1,661 A was observed with increasing speed of the disk, while the intensity of all metal lines decreased. The high concentration of hydrogen in the plasma was caused by too much water vapor entering the spark gap. The authors studied the influence of H on the line intensity, and took the spectrum of solutions on discharge in air and in hydrogen. On the basis of these results, which confirmed the disturbing influence of the vapors of water,

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S/0??/61/0??/00?/011/0?5
B101/B203

Increas... in ...

they designed a new capillary electrode in which the entry of water vapor into the spark gap was reduced (Fig. 2). The solution to be analyzed (2-3 ml) is filled into the glass tube 1 (length 120 mm, inside diameter 5 mm). The upper end of 1 is closed by stopper 2. The solution is held in the glass tube by the atmospheric pressure. The tube bottom is connected via rubber ring with electrode 3 (diameter 5-6 mm, length 15 mm) of spectroscopically pure carbon. 3 has a capillary opening, 1 mm in diameter. Tube 1 is fixed in a ПС-21 (PS-21) tripod. Wire 4 connects the electrode with the current source. The spark gap is formed between 3 and the conical electrode 5. The water vapor rises in 1, and arrives at the spark gap in a small quantity only. Table 1 compares the results obtained with this electrode with those of other electrodes. The sensitiveness of detection of Au, Sc, Nb, Ge is increased to the 3-5 fold. Exposure time is 45-60 seconds. The probable error of a single measurement is 6-8%. A. K. Rusanov and L. I. Sosnovskaya are mentioned. There are 2 figures, 2 tables, and 7 references: 6 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Irkutskiy gosudarstvennyy nauchno-issledovatel'skiy institut redkikh metallov (Irkutsk State Scientific Research Institute of Rare Metals)

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B101/B203

Increase in ...

Legend to Table 1: Intensity of lines (in relative units) of metals and hydrogen in the spectrum of the solution with different electrodes:
1) electrode, 2) intensity of lines,
3) disk electrode, 4) capillary electrode,
5) capillary electrode of the new type

1 Электрод	2 Интенсивность линий		
	Sc 3613,84	Co 3433,04	H 6562,7
3 Тарелочный	472	18,2	415
4 Капиллярный	945	32,7	260
5 Капиллярный новой формы	1100	41,7	52

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Increase in ...

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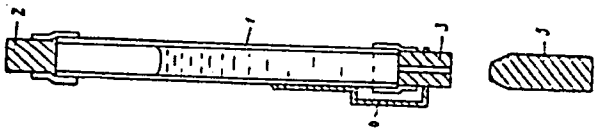
B101/B203

Рис. 2. Схема капиллярного электрода новой формы для спектрального анализа растворов

Fig. 2



Card 4/4

RAYKHBAUM, Ya.D.; MALYKH, V.D.; LUZHNOVA, M.A.

Scintillation method for spectral analysis of tantalum and niobium in ores. Zav. lab. 29 no.6:677-680 '63. (MIRA 16:6)

1. Irkutskiy gosudarstvennyy nauchno-issledovatel'skiy institut redkikh metallov.
(Tantalum ores--Spectra)
(Niobium ores--Spectra)

RAYKHBAUM, Ya D.

24(4) PHASE I BOOK EXPLOITATION SOV, 3348

Lontsikh, Samuil Vladimirovich, Vsevolod Vasil'yevich Nedler, and Yakov Davidivich Raykhbaum

Spektral'nyy analiz metallometricheskikh prob (Spectrum Analysis of Metallometric Samples) Moscow, Gosgeoltekhizdat, 1959. 117 p. Errata slip inserted. 4,500 copies printed.

General Ed.: A.K. Rusanov, Professor; Ed. of Publishing House: N.B. Nekrasova; Tech. Ed.: V.V. Bykova.

PURPOSE: This handbook is intended for geological prospectors and laboratory personnel engaged in spectrum analysis of metals.

COVERAGE: The handbook deals with methods of spectrum analysis and apparatus for metallometric samples. It describes laboratory procedures, semiquantitative spectrum analysis of geological samples, and spectrum analysis based on evaporation of samples from the electrode crater as well as on air jet injection of samples into the arc discharge. It also describes methods of sampling and the interpretation of analytical results. The

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data were provided by various scientific institutes and organizations, including the Irgiredmet, TsNIGRI, Sibtsvetmetrazvedka, VIMS, and VSEGEI. The authors thank M.M. Kler, A.P. Solovov, Ye.A. Sergeyev, A.F. Li, I.S. Vakhromeyev, Ye.S. Kostyukov, P.A. Stepanov, Ye.M. Kvyatkovskiy, V.M. Khokhlov, S.M. Solodovnik, S.M. Melamed, M.S. Leshchinskiy, and I.I. Smolyak. There are 41 references: 34 Soviet, 6 English, and 1 German.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress (TN 560 .L6)

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TM/jb
4-5-60

83358
S/139/60/000/004/033/033
E032/E514

5.5310

AUTHORS: Raykhbaum, Ya. D. and Malykh, V.D.

TITLE: Current Dependence of Line Intensities in Arc Spectra

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1960, No.4, pp. 147-151

TEXT: Measurements were carried out of line intensities and discharge-column radii as functions of the current. The spectra were photographed with the aid of an ISP-28 spectrograph. A determination was made of the integral intensity of lines when a given amount of the element under investigation was evaporated from the anode. The electrodes were made of carbon and had a diameter of 6 mm. The average rate of evaporation was determined by measuring the time of existence of a characteristic line of the element in the arc spectrum. Steps were taken to ensure that the rate of evaporation remained constant for different currents. The radius of the discharge column was determined by photographing the column and then measuring the width of the image obtained. Measurements showed that for arc currents between 5 and 20 A the relation between the radius of the column and the current flowing through it can be represented by the formula $r_c^2 = ai^k$ where $k > 1$. For a carbon arc the

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E032/E514

Current Dependence of Line Intensities in Arc Spectra

values of k were 1.2 - 1.35. When salts of metals having low ionization potentials were inserted into the electrode channels, the magnitude of k decreased to 0.5 - 1.05. A similar result was obtained for the intensity as a function of arc discharge current. For a carbon arc the intensity was proportional to the discharge current raised to a power of 1.2 - 1.3. The introduction of sodium salts into the electrode channel reduced this power to 0.8 - 1. This applies to small quantities of the salts. When the amount of salts introduced into the electrode channel is increased, reabsorption becomes important. In order to determine this effect, measurements were carried out of the radius of the emitting column by the photographic method, and the current distribution in the discharge by the probe method. The probe method gave different results from the photographic method. The results obtained are summarized in the following table.

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Current Dependence of Line Intensities in Arc Spectra

Arc discharge current (A)	Pure carbon electrodes		Na_2CO_3 in electrode channel	
	Photographic method	probe method	Photographic method	probe method
5	3.83	2.59	3.33	2.12
7.5	5.67	3.77	3.90	3.45
10	7.00	5.92	4.84	4.52
15	8.32	6.88	6.16	5.75
20	9.65	8.75	7.66	7.06

The above table gives the diameter of the discharge column (mm). The electrode diameter was 6 mm. The results indicate that the changes in line intensity are connected with changes in the radius of the emitting column. This radius is different from the radius of the current-conducting channel of the arc. The excitation potential must be taken into account in theoretical calculations of the diameter of the emitting column. As the discharge current increases, the difference between the two radii becomes smaller.

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E032/E514

Current Dependence of Line Intensities in Arc Spectra

It follows that the thickness of the column layers in which self-reversal of resonance lines takes place also decreases with current. This was confirmed for lead and mercury lines. A considerable decrease in the self-reversal of resonance lines was observed when reabsorption as a whole was increasing. All these effects are important to the explanation of certain effects observed in spectrum analysis. Thus, when the concentration of the element is low, an increase in the discharge current leads to a considerable increase in the line intensities. At high concentrations re-absorption rapidly increases, and is accompanied by a reduction in the concentration sensitivity and the slope of logarithmic intensity versus current curves. There are 5 figures, 1 table and 8 references: 4 Soviet, 2 German and 2 English.

ASSOCIATION: Irkutskiy nauchno-issledovatel'skiy institut redkikh metallov (Irkutsk Scientific Research Institute for Rare Metals)

SUBMITTED: July 4, 1959

Card 4/4

RAYKHBAUM, Ya.D.

Effect of the chemical composition of samples on the intensity of lines in the spectrum analysis of ores. Izv.vys.ucheb.zav.; fiz. no.3:55-61 '59. (MIRA 12:10)

1. Irkutskiy gosuniversitet imeni A.A.Zhdanova.
(Ores--Spectra)

137-58-4-8624

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 328 (USSR)

AUTHOR: Raykhbaum, Ya. D.

TITLE: The Kinetics of Vapor Formation by a Substance in an Electric Arc (O kinetike paroobrazovaniya veshchestva v elektricheskoy duge)

PERIODICAL: Tr. Irkutskogo un-ta, 1957, Vol 15, pp 63-72

ABSTRACT: The kinetics of the formation of vapor by metals and compounds thereof in the crater (C) of an electrode was studied in terms of the period of time during which spectral lines are visible. To do this, various amounts of a substance were placed in electrode C, and a spectrometer was employed to determine the length of the time during which lines were present in the spectrum. It was shown that $t=am^k$, where t is the time of vapor formation, m is the mass of the specimen, and a and k, which characterize the kinetics of the process, depend upon the thermal properties of the specimen and have different values under different conditions. An independently-heated electrode was used to study the kinetics of vapor formation at various C temperatures. Photographs of the dependence of the changes in the intensities of

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137-58-4-8624

The Kinetics of Vapor Formation by a Substance in an Electric Arc

the spectral lines upon time and electrode temperature were obtained. Measurement of vapor formation time provides a simple method of quantitative analysis and comparison of the volatility of various substances in the C of an arc electrode.

1. Metallic vapors--Spectrographic analysis 2. Spectrometers--Applications

Yu. B.

Card 2/2

RAYKHBAUM, Ya.D.; KOSTYUKOVA, Ye.S.

Spectrum analysis in the control of nonferrous metal ore concentration processes. Izv. AN SSSR Ser.fiz.18 no.2:289 Mr-Ap '54. (MLRA 7:11)
(Nonferrous metals--Spectra) (Ore dressing)

USSR/ Physics - Metal erosion

Card 1/1 Pub. 43 - 22/97

Authors : Raykhbaum, Ya. D., and Krestyaninov, A. G.

Title : Electrical erosion of metal in a spark discharge

Periodical : Izv. AN SSSR. Ser. fiz. 18/2, page 258, Mar-Apr 1954

Abstract : The results obtained in studying the diffusion processes of different metals in a spark discharge are briefly described. The metals investigated are divided into the following series according to the magnitude of their erosion in a spark discharge: Bi, Pb, Tl, Sn, Cd, Au, Ga, Zn, Pt, Ag, Cu, W, Fe, Ni, Mo, Al, Be with Bi having maximum and Be minimum erosion. A calculation of the coefficients of linear correlation between the erosion magnitude and the basic thermal constants showed that maximum correlation exists between the difference of the heat content of the solid and gaseous phases of the metal and the characteristic temperature of the metal. The effect of metal oxidation on the erosion magnitude in a spark discharge was not observed.

Institution : .....

Submitted : .....

RAYKHBAUM, Ya.D.; KRES'YANINOV, A.G.

Electric erosion of metals in spark discharge. Izv. AN SSSR Ser.fiz.18 no.2:258 Mr-Ap '54. (MLRA 7:11)
(Spectrum analysis) (Electric spark)

83915

S/051/60/009/004/001/034

E201/E191

26.2312

AUTHORS: Raykhbaum, Ya.D., and Malykh, V.D.

TITLE: A Spectroscopic Study of Diffusion of Atoms in an Electric Arc

PERIODICAL: Optika i spektroskopiya, Vol 9, No 4, 1960, pp 425-427

TEXT: A d.c. arc was struck in air between two carbon electrodes, 5 mm apart. Probes of Nichrome wire, coated with chlorides, were transported rapidly (120 cm/sec) through the arc. In this way "pulses" of Li, Na, Ca, Zn, Ag, Cd and Tl atoms were introduced into the arc and their emission lines between 4400 and 5700 Å were recorded with a glass spectrograph KC-55 (KS-55) and two photomultipliers ЭУ-19 m (FEU-19 m). The photomultipliers were connected to a cathode-ray oscillograph ЭО-7 (EO-7) whose screen was photographed to obtain the time dependence of the emission intensity I (Fig 1), given by $I = I_0 \exp(-t/\tau)$, where t is the time and τ is the average duration of stay of an atom in the arc. Values of τ were found by plotting $\log I = f(t)$, as in Fig 2. These values were of the order of 10^{-3} sec, increasing with the atomic number of the element:

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A Spectroscopic Study of Diffusion of Atoms in an Electric Arc

1.05×10^{-3} sec for Li, 2.10×10^{-3} sec for Tl (a table on p 426). The effective diffusion coefficients of the atoms were inversely proportional to τ; they ranged from 20.2 cm^2/sec for Li to 10.1 cm^2/sec for Tl (last column of the table on p 426). With increase of the arc current from 6 to 20 A, the value of τ rose: τ was proportional to i^k, where $k = 1.1-1.3$ (Fig 3).

There are 3 figures, 1 table and 5 references: 3 Soviet, 1 English and 1 German.

SUBMITTED: January 19, 1960

Card 2/2

5 (2)
AUTHORS: Raykhbaum, Ya. D., Kostyukova, Ye. S. SOV/32-25-8-22/44

TITLE: Application of the Addition Method at the Spectrum Analysis of Ores for Indium and Germanium

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 8, pp 961 - 963 (USSR)

ABSTRACT: A new version of the method of additions (Refs 1,2) was developed which is based on the following principle: at the spectra of a sample of a given composition it is possible to represent the correlation of the line intensity with the concentration by the function $I = f(C)$ (Figure, Curve 1); change of the chemical composition of the sample changes the function $I_1 = f_1(C)$ (Curve 2). When the composition of the sample is not known and the analysis is effected with (Curve 2) instead of (Curve 1) an error is being made because instead of the real concentration x, the value x' is being found. If on the other hand a known quantity Δ of the element to be determined is added to the same sample and curve 2 is applied for the determination the resulting value will be the value $x' + \Delta'$ instead of $x + \Delta$. Assuming that the composition of the sample is of the

Card 1/3

same influence on the measuring result of the Δ as on the determination of the concentration x, it can be assumed that $x = \frac{\Delta}{\Delta'} x'$ (1). References 1,2 demonstrated that (1) is met if $f_1(C) = nf(mC)$ (2) (m and n = constants). If the influence of the chemical composition of the sample causes a variation of the curve inclination, the function between the measured magnitudes has a more complicated character $\left(1 + \frac{\Delta}{x}\right)^b = \left(1 + \frac{\Delta'}{x'}\right)^{b'}$ (b and b' = constants), and the equation (1) can only be applied as an approximation. The approximation will be the greater, the greater the values b and b' are, and the less Δ is in relation to x. This version of the method of additions permits the determination with the addition of only one substance and at the calculation a calibrating diagram is being used which was recorded according to the standard samples. The above-described method was applied in the determination of In and Ge in products of ore processing procedures which pro-

ducts had different chemical compositions. The article contains the working procedure and the results of the determinations (Tables 1,2). There are 1 figure, 2 tables, and 3 references, 1 of which is Soviet.

ASSOCIATION: Irkutskiy gosudarstvennyy institut redkikh i malykh metallov (Irkutsk State Institute of Rare and Minor Metals)

RAYKHBAUM, Ya.D.; MALYKH, V.D.

Relation of line intensity in an arc discharge spectrum to the current. Izv. vys. ucheb. zav.; fiz. no.4:147-151 '60. (MIRA 13:9)

1. Irkutskiy nauchno-issledovatel'skiy institut redkikh metallov.
(Spectrum analysis)

RAYKHBAUM, Ya. D.

"On Photometering Spectra of Variable Brightness and Lines of Low Intensity," iz. Ak. Nauk SSSR, Ser. Fiz., No. 6, 1945.

AVAKYAN, A.A., gornyy inzh.; ZOLOTNITSKIY, Yu.I.; RAYKHEL', B.L.

Efficient conditions of mine operation. Ugol' 39 no.2:6-9 F '64.
(MIRA 17:3)

1. Glavnyy inzh. shakhty No.62 "Kapital'naya" (for Zolotnitskiy).
2. Dneprepetrovskiy gosudarstvennyy institut po proyektirovaniyu shakhtnykh ustanobok (for Raykhel').

RAYKHEL', B. L., gornyy inzh.

Mine assets of the Donets Basin. Ugol' Ukr. 7 no.4:7-10 Ap '63. (MIRA 16:4)

1. Dnepropetrovskiy gosudarstvennyy institut po proyektirovaniyu shakhtnykh ustanovok.

(Donets Basin—Coal mines and mining—Accounting)

BYFANOV, I. V.: SYROVATKO, M. V.: RAYKHEL', B. L.

Mining Engineering

Applying the analytic method in mining (continued). Gor.zhur. no. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, April 1952. Unclassified.

KALACHNIKOV, A.Ya.; RAYKHEL', D.L.

Conference of economists of "Dneprogiprokhakhta" design institutes. Ugol' Ukr. 10 no. 1:56 Ja '66. (MIRA 18:12)

RAYKHEL', N.L.

Evaluating the properties of transient processes in coupled control systems. Izv. vys. ucheb. zav.; energ. no.4:104-112 Ap '58. (MIRA 11:6)

1. Bryanskiy institut transportnogo mashinostroyeniya.
(Automatic control)

AUTHOR: Raykhel', N. L. (Bryansk) SOV/103-19-11-3/10

TITLE: Calculation of Transient Processes in Coordinated Control Systems (Raschet perekhodnykh protsessov v sistemakh svyazannogo avtomaticheskogo regulirovaniya)

PERIODICAL: Avtomatika i telemekhanika, 1958, Vol 19, Nr 11, pp 1016-1026 (USSR)

ABSTRACT: This is to examine transient processes in coordinated control systems while not observing the conditions for dynamic autonomy. The conditions for static autonomy are considered fulfilled. For the solution of the problem frequency calculation methods, like those generally used with systems for automatic control of a quantity (Refs 5,6), are employed. The system of coordinated control of two quantities are examined carefully here. Methods are indicated for the expansion and generalization of the data given for use with systems having three and more control quantities. The conception concerning partially independent control systems is also introduced. Transient functions are derived for the control quantities. Construction of the transient process curves is shown in the appendix. As an example, curves with

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Calculation of Transient Processes in Coordinated Control Systems. SOV/103-19-11-3/10

various loads for the control system of a stream turbine with stream withdrawal are given. There are 8 figures, 1 table, and 9 Soviet references.

SUBMITTED: April 2, 1957

Card 2/2

YABLONIK, M.M., kand.tekhn.nauk, dotsent; KAYKHEL', N.L., kand.tekhn.nauk, dotsent

Measurement of the moisture content of an air flow. Izv. vys. ucheb zav.; energ. 6 no.3:104-108 Mr '63. (MIRA 16:5)

1. Bryanskiy institut transportnogo mashinostroyeniya. Predstavlena kafedroy turbostroyeniya.
(Steam turbines)

RAYKHEL', N. L., Candidate of Tech Sci (diss) -- "Problems of the dynamics of systems of bound automatic regulation (Based on systems of regulating steam turbines)". Leningrad, 1959. 10 pp (Min Higher Educ USSR, Leningrad Polytech Inst im Kalinin), 150 copies (KL, No 20, 1959, 113)

ITINA, L., kand.ekonom. nauk, RAYKHEL'SON, M.

Manufacture of artificial protein sausage casings. Mias.ind. SSSR 34 no.3:35-37 '63. (MIRA 16:7)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy myasnoy promyshlennosti.

RAYKHEL', N.L. (Bryansk)

Calculating transients in coordinated automatic control systems [with summary in English]. Avtom. i telem. 19 no.11:1016-1026 N '58. (MIRA 11:11)

(Automatic control)

S/262/62/000/022/003/007
E073/E435

AUTHORS: Korzh, M.I., Raykhel's, Ye.I., Fal'ko, I.I.

TITLE: On changes in the linear dimensions of piston pins during operation of the engine

PERIODICAL: Referativnyy zhurnal. Otdel'nyy vypusk. Silovyye ustanovki, no.22, 1962, 34, abstract 42.22.200. (Avtomob. prom-st'. no.1, 1962, 41-43)

TEXT: The results are given of investigations of the causes of increase in the linear dimensions of piston pins of the experimental diesel engine СМД-14 (SMD-14) during operation and methods of combating this phenomenon are described. It was established that the increase in the dimensions of the piston pins was due to the presence of a high percentage of austenite (up to 30%) in the case-hardened layer. The austenite-to-martensite transformation during tempering of the piston pins (180 to 240°C) was accompanied by an increase in volume which is the greater the higher the tempering temperature. A decrease of the austenite content to 10% was achieved by changing the conditions of heat-treatment. The components were hardened from the lower limit of the hardening temperature range, about

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790°C) and tempering was at 220 to 240°C with a holding time of about 1.5 hours. By means of this heat-treatment the increase in the linear dimensions was reduced from 20 to 10 μ. Subsequent experiments have shown that holding components at -70°C for 4 hours reduces the austenite content of the case-hardened layer to zero and, in this case, there was no increase in the linear dimensions of the piston rings.

[Abstractor's note: Complete translation.]

L 52999-65 EWT(m)/EWP(i)/T/EWP(t)/EWP(b)/EWA(c) JD

ACCESSION NR: AP5010830 UR/0020/65/161/004/0821/0823

AUTHOR: Podlesnaya, A. D.; Raykhel's, Ye. I.; Smushkov, I. V.; Trembach, V. M.

TITLE: On the dislocational structure of the surface layer of alkaline-halide monocrystals

SOURCE: AN SSSR. Doklady, v. 161, no. 4, 1965, 821-823

TOPIC TAGS: crystal physics, monocrystaline structure

ABSTRACT: The structure of the layer near the surface in monocrystals of LiF and NaCl formed by annealing is studied. Graphical results are offered for the density of dislocations expressed in terms of the distance from the surface of a LiF crystal annealed at 775° for 24 hours and for 1.5 hours both in a vacuum and in an atmosphere of saturated steam in a vacuum. The experiments indicated that, near the surface of an annealed crystal, a layer is formed having a dislocation structure very different from that observed in the body of the crystal. "The authors express their gratitude to Prof. Ya. Ye. Geguzip for his valuable advice and helpful discussion of the results obtained." Orig. art. has: 1 formula, 3 figures.

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L 52999-65

ACCESSION NR: AP5010830

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov, stsintillyatsionnykh materialov i osobo chistykh khimicheskikh veshchestv (All-Union Scientific Research Institute of Monocrystals, Scintillating Materials, and Specially Pure Chemical Substances)

SUBMITTED: 28Nov64 ENCL: 00 SUB CODE: SS

NO REF SOV: 008 OTHER: 004

Card 2/2

137-58-6-12251

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 154 (USSR)

AUTHOR: Raykhel'son V.Ye.

TITLE: Utilization of an Advanced Cold Forging Procedure at the Khar'kov Tractor Plant (Primeneniye progressivnoy tekhnologii kholodnoy shtampovki na Khar'kovskom traktornom zavode)

PERIODICAL: V sb. progressivn. metody shtampovki i kovki. Khar'kov, Oblizdat 1957, pp 209-225

ABSTRACT: An increase in labor productivity requires the organization of mass-production lines, but the possibility of doing so is limited by the anneals required between operations. With the purpose of reducing these, it is recommended that the process be conducted at optimum degrees of deformation and pad pressure. The design of a die (D) with a pressure-equalizing shock absorber to provide the minimum pad pressure required, is adduced. The need for partial or complete automation of the D is indicated. Designs are presented of D with claw or pulling-roller feed of the strip, with knock-out mechanism functioning after the punching operation, and with a lever-type knock-out mechanism. Also adduced are examples of designs of D for

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137-58-6-12251

Utilization of an Advanced Cold Forging Procedure (cont.)

simultaneous forming of several parts, designs of D with expulsion from beneath the slide block for safety, and D with "floating" fins.

M.Ts.

1. Industrial plants--Organization 2. Metals--Processing 3. Dies--Design

Card 2/2

VIKTOROV, N.V.; RAYKHENBERG, S.M.

Experimental-exponential construction of school buildings made of large concrete blocks. Gor.khoz. Mosk. 29 no.11:4-6 N '55. (MLRA 9:3)

1. Glavnyy inzhener tresta No. 6 Pyatogo territorial'nogo upravleniya Glavmosstroya (for Viktorov); 2. Glavnyy inzhener otdela organizatsii stroitel'stva Spetsial'nogo arkhitekturno-konstruktorskogo byuro.
(Schoolhouses) (Concrete blocks)

RAYKHENBERG, S.M., inzhener.

For better structural design of large-panel buildings. Gor. khoz. Mosk. 29 no.5:6-9 My '55. (MLRA 8:6)
(Precast concrete construction)

PROSKURNIN, V.P., inzh.; RAYKHENBERG, S.M., inzh.; MOISEYEV, N.I., inzh.; PERL'SHTEYN, Z.M., nauchnyy red.; LYTKINA, L.S., red. izd-va; SHERSTNEVA, N.V., tekhn. red.

[Flow sheets for the construction of completely prefabricated apartment houses]Sbornik tekhnologicheskikh kart po stroitel'stvu polnosbornykh zhilykh zdanii. Moskva, Gosstroiizdat, 1962. 311 p. (MIRA 16:1)
(Apartment houses) (Building)

MUTSYANKO, Vitt Iosifovich; RAYKHENSHTEYN, I.S., inzh., retsenzent; KUDASOV, G.F., kand.tekhn.nauk, red.; VAKSER, D.B., dotsent, red.; LEYKINA, T.L., red.izd-va; KONTOROVICH, A.I., tekhn.red.

[Centerless grinding] Bestsentrovoe shlifovanie. Pod obshchei red. G.F.Kudasova. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 78 p. (Bibliotechka shlifovshchika, no.4) (MIRA 13:11)

(Grinding and polishing)

BELETSKIY, M.S., prof., doktor fiz.-matem. nauk; RAYKHENSHTEYN, I.TS.; SHATALOVA, O.K., assistent

Using molybdenum disulfide for reducing the wear of cutting tools. Mashinostroitel' no.7:40-42 Jl '65. (MIRA 18:7)

1. Zaveduyushchiy kafedroy fiziki Leningradskogo inzhenerno-ekonomicheskogo instituta imeni Pal'miro Tol'yatti (for Beletskiy). 2. Zamestitel' nachal'nika instrumental'nogo otdela Nauchno-issledovatel'skogo instituta tekhnologii mashinostroyeniya Leningradskogo soveta narodnogo khozyaystva (for Raykhenshteyn). 3. Kafedra fiziki Leningradskogo inzhenerno-ekonomicheskogo instituta imeni Pal'miro Tol'yatti (for Shatalova).

RAYKHENSHTEYN, Isaak TSfan'yevich; SEMENENKO, P.A., inzh., red.; GVIRTS, V.L., tekhn. red.

[Semiautomatic unit for cutting pipes] Poluavtomaticheskoe prisposoblenie dlia razrezki trub. Leningrad, 1960. 11 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom no.23. Seriia Obrabotka metallov rezaniem, no.4) (MIRA 14:5)

(Pipe cutting)

NADEL', Abram Grigor'yevich; KARPOV, Sergey Grigor'yevich; RAYKHENSHTEYN, I.TS., red.; ALABYSHEVA, N.A., red. izd-va; GVIRTS, V.L., tekhn. red.

[Machining with end-milling cutters equipped with many-faceted hard-alloy tips which do not need to be re-sharpened] Opyt raboty tortsovymi frezami, osnashchennymi neperetachivaemymi mnogogrannymi plastinkami iz tverdogo splava. Leningrad, 1963. 12 p. (Leningradskii dom nauchno-tekhnicheskogo propagandy. Obmen peredovym opytom. Seriia: Mekhanicheskaia obrabotka metallov, no.16)
(MIRA 17:1)

RAYKHENSHTEYN, I.Ts.

PHASE I BOOK EXPLOITATION SOV/4672

Ispol'sovaniye reservov mashinostroitel'nogo proizvodstva; iz opyta peredovykh zavodov (Utilization of Reserves in the Machine Building Industry; Practices of Leading Plants) [Leningrad] Lenizdat, 1959. 258 p. 3,000 copies printed.

General Ed.: A.M. Kocher, Candidate of Technical Sciences; Ed.: M.S. Chervova. Tech. Ed.: I.M. Tikhonova.

PURPOSE: This collection of articles is intended for workmen and technical personnel of the machine-building industry.

COVERAGE: The book examines principal trends in the utilization of unused production capacity of machine building plants and indicates ways to realize these reserves. On the basis of examples drawn from the practice of the leading plants of the Lensovnarkhoz, the authors show how to utilize this unused capacity by applying the following measures: improvement of the processability of constructions; bringing the shapes and sizes of blanks closer to the shapes and sizes of finished parts; replacement of mechanical machining with cold stamping; improvement of the efficiency of existing technological processes and introduction of new ones; and a comprehensive mechanization and automation of the equipment. The problem of utilizing unused capacity in the construction of heavy machinery is dealt with separately. No personalities are mentioned. There are no references.

AVAILABLE: Library of Congress (TJ1160.E8)

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RAYKHENSHTEYN, Isaak TSfan'yevich; PAKIDOV, P.A., nauchnyy red.; CHERVOVA, M.S., red.; ONOSHKO, N.G., tekhn.red.

[Efficient machining on automatic lathes] Ratsional'noe ispol'zovanie tokarnykh avtomatov. Leningrad, Lenizdat, 1959. 58 p. (MIRA 13:1)
(Lathes) (Automatic control)

PHASE I BOOK EXPLOITATION SOV/3654

Raykhenshteyn, Isaak Tsfan'yevich

Ratsional'noye ispol'zovaniye tokarnykh avtomatov (Efficient Use of Automatic Lathes) [Leningrad] Lenizdat, 1959. 58 p. (Series: Opyt novatorov Leningradskoy promyshlennosti) 3,000 copies printed.

Scientific Ed.: P. A. Pakidov; Ed.: M. S. Chervova; Tech. Ed.: N. G. Onoshko.

PURPOSE: This book is intended for technical personnel and workers in automatic-lathe operation.

COVERAGE: The book deals with problems of practical planning of manufacturing processes involving group setup and progressive cutting regimes on automatic lathes. A description of the automation of finishing operations is presented. No personalities are mentioned. There are 10 references, all Soviet.

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AVAILABLE: Library of Congress (TJ1218 .R25)

VK/fal
7-8-60

Card 2/2

RAYKHENSHTEYN, I. Ts.

123-1-754

Translation from: Referativnyy Zhurnal, Mashinostroyeniye, 1957, Nr 1, p. 114 (USSR)

AUTHOR: Raykhenshteyn, I. Ts.

TITLE: Attachment for Bore-hole Grinding in Spiral Gear (Prisposobleniye dlya shlifovaniya otverstiya shesterni s kosym zubom)

PERIODICAL: Tekhnologiya transportn. mashinostroyeniya, 1956, Nr 2, p. 35

ABSTRACT: Description is given of an attachment in the shape of a split sleeve and bearing cage with 10 loose balls, the balls are kept from falling out by pins set at the face and in the hold of the cage at the same angle as the teeth of the ground gear. The chucking of the sleeve centers the gear by transferring the holding pressure by means of the loose balls located in the spaces between the gear teeth. The gear is inserted into the cage in advance and requires only 7 - 10 seconds for its mounting on the machine tool. The attachment eliminates completely damage

Card 1/2

Attachment for Bore-hole Grinding in Spiral Gear (Cont.) 123-1-754

caused by backlash of the gear teeth in relation to the chuck opening.

E.E.F.

Card 2/2

RAYKHENSHTEYN, I.TS.

Finish-machining of boreholes. Inform.tekh.sbor.no.1:30-34 '54.
(Machine-shop practice) (MIRA 9:7)

MOZHANKOV, V.; RAYKHER, A.

Clearing payment bureaus attached to construction trusts, and business accounting. Den. i kred. 20 no.12:63-67 D '62. (MIRA 16:1)

1. Glavnyy bukhgalter stroytresta No. 150 Ministerstva stroitel'stva UzSSR (for Mozhankov). 2. Zamestitel' glavnogo bukhgaltera po finansovoy rabote tresta Mosstroy No. 13 (for Raykher).

(Construction industry—Finance)
(Payment)

AUTHOR: Raykher, A.S. (Engineer) SOV/110-58-10-18/24

TITLE: Concerning V.I. Korol'kova's book 'Electrical Safety in Industry' (Po povodu knigi V.I. Korol'kovoy)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, No.10. pp. 71-72 (USSR)

ABSTRACT: This new edition of the book is said to be useful and of value in the campaign against electrical accidents in industry. However, the entire tone of the review is very critical of defects in the book. Several examples of self-contradiction and apparent confusion of thought are given. There are 6 literature references (Soviet)

1. Electrical industry--Safety measures 2. Accidents 3. Literature

Card 1/1

RAYKHER, A.S., inzh.

In reference to V. I. Korol'kova's book ("Electrical safety in industrial establishments" by V. I. Korol'kova. Reviewed by A.S. Raikher) Vest.elektroprom. 29 no.10:71-72 O '58. (MIRA 11:11)
(Electric engineering--Safety measures)

RAYKHER, B.I.

3091. **Variability of *Rickettsia prowazeki* under long-continued cultivation outside the organism of warm-blooded animals.** B. I. Raikher and N. I. Raikher *Sborn. nauch. Rabot Molotov. med. Inst.*, 1955, 71—78; *Referat. Zh. Biol.*, 1956, Abstr. No. 75579.—Long-continued cultivation (6 years) of strains of *R. prowazeki* by means of epidermal membranes and also in the louse reduced their toxicity, antileucocytic action and virulence for warm-blooded animals with full retention of antigenic properties. The experiments carried out indicate the possibility of qual. changes in strains of rickettsiae depending on their cultural conditions; the question of the irreversibility of these changes is not settled. (Russian)

C. C. BARNARD

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RAYKHER, B. I.

29291 Fagovydeleniye kak metod la-boratornoy diagnostiki dizenterii. Trudy Molotovsk. gos. stomatol. in-ta, vyp. 8, 1949, s. 313-24

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

RAYKHER, B. I.

29300. Sluchay mestnoy gnoynoy infekstii, vyzvannoy palochkoy Elberta u chelovika s otsutstviyem bryushnogo tifa v anamneze. Trudy Molotovsk. gos. stomatol. in-ta, vyp. 8, 1949, s. 325-29

SO: Izvestiya Ak. Nauk Latviyskoy SSR. No. 9, Sept. 1955

MAL'TSEVA, Z.M.; KOBYL'SKIY, A.P direktor; PESHKOVSKIY, G.V., professor, nauchnyy rukovoditel'; RAYKHER, B.I., laureat Stalinskoy premii, nauchnyy konsul'tant.

Results of treating chronic dysentery in children with Prof. Chernokhvostov's vaccine. Zhur.mikrobiol.epid.i immun. no.3:25 Mr '53. (MLRA 6:6)

1. Molotovskiy institut epidemiologii i mikrobiologii. (Dysentery)